

REMARKS

Claims 1, 2 and 4-16 are pending. Claims 1, 11 and 16 are independent. Claims 1, 11 and 16 have been amended. Applicants respectfully request reconsideration and withdrawal of the Final Rejection mailed March 26, 2002, and allowance of the present application.

Reason for Entry of Amendments

Claim 1 has been amended to include the subject matter of claim 3. Claims 11 and 16 have been rewritten in independent form. Therefore, no new issues have been introduced.

Improper Final Rejection

Applicants hereby reassert the statements regarding the impropriety of the final rejection mailed September 25, 2002. A Final Rejection is improper unless the grounds for rejection are "clearly developed to such an extent that the Applicant may readily judge the advisability of an appeal." *See MPEP 706.07.* To this point, the Examiner has only provided a cursory review of some of the features in independent claim 1. None of the dependent claims have been addressed to this date.

The Examiner has already subjected Applicants to great expense by prematurely abandoning the present application. Further, the Applicants still have not received a fair appraisal from the Examiner of the patentability of the pending claims. In order to avoid further unnecessary expense to Applicants, should the Examiner find that the present amendment does not place the application in condition for allowance, Applicants hereby formally request a personal interview with the Examiner. Further, Applicants request that the Examiner's Supervisor attend the interview.

Rejection Under 35 U.S.C. § 102(b)

Claims 1-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by O'Brien. Applicants respectfully traverse.

By this amendment, claim 1 has been amended to include the subject matter of claim 3, and claims 11 and 16 have been rewritten in independent form.

Amended claim 1 recites that a “front portion of the implant is designed with a conical thread which has a conicity exceeding the conicity of the slightly conical thread.” O’Brien does not disclose two degrees of conicity in a threaded portion.

Amended claim 4 recites:

...the conicity of the slightly conical thread is chosen between 0.1 - 0.4 mm or has an angle of inclination of about 0.5 - 2°, and/or the thread conicity of the thread at the said front portion of the implant is of the order of 0.4 - 0.8 mm or with an angle of inclination of about 10 - 15°, and the front portion of the implant has a length or height of about 10 - 30% of the length of the threaded part of the implant.

O’Brien does not disclose the conicity values recited in claim 4.

Amended independent claim 11 recites that a “number of thread spirals is adapted to the number of cutting edges so that symmetrical cutting forces are obtained.” O’Brien does not disclose a number of thread spirals adapted to a number of cutting edges.

The Examiner has likewise failed to address the limitations of several dependent claims. The following is a nonexclusive list of claims not addressed by the Examiner and which are not anticipated by O’Brien:

Claim 12, which recites a relationship between thread spirals and cutting edges, is not anticipated by O’Brien.

Claim 15 recites that “the implant is arranged with a minimum diameter that is 1-5% greater than the diameter of the hole in the bone substance.” O’Brien does not disclose this range of negative tolerances.

Anticipation of a claim requires the disclosure of each and every recitation as set forth in the claims in a prior art reference. *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985); *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986); *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986). O’Brien fails to meet the standards recited above, and the rejection based on O’Brien should be withdrawn.

Conclusion

In view of the above, reconsideration and allowance of the application are respectfully solicited. If the Examiner finds the above arguments unconvincing, Applicants request withdrawal of the finality of the Final Office Action and an evaluation of the claims on their merits.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Applicant hereby authorizes the Commissioner to charge our Deposit Account No. 22-0185 for a two month extension of time (\$410.00), under Order No. 21547-00268-US from which the undersigned is authorized to draw. If there is any variance in the fees due, the Commissioner is hereby authorized to charge or credit any difference to the above mentioned deposit account.

Respectfully submitted,

Date: January 23, 2002



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PATENT AND TRADEMARK OFFICE

C. Keith Montgomery
C. Keith Montgomery, Reg. No. 45,254
Connolly Bove Lodge & Hutz LLP
Customer Number 30678
1990 M Street, N.W.
Washington, D.C. 20036-3425
Telephone: 202-331-7111

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Twice Amended) Threaded implant for obtaining reliable anchoring in bone substance, the bone substance being provided with a hole in whose side wall an internal threading may be established which can cooperate with an external threading on the implant for reliable anchoring and healing-in of the implant in the bone substance, wherein the implant threading is arranged to force the bone substance out in essentially radial directions as a function of the extent to which the implant is screwed into the hole, that the implant threading has a slight conicity which extends along most or part of the length of the implant and which cooperates with a circular cylindrical hole in the bone substance to effect greater forcing out of the bone substance at the outer parts of the hole than at the inner parts of the hole, the degree of forcing out being adapted in relation to the softness of the bone substance in order to achieve the reliable anchoring, and that said conical threading comprises two or more thread spirals which provide a tight threading which permits effective integration with the bone substance during the healing-in process and counteracts deformation or breaking-up of fine bone trabeculae which surround the hole in the bone, and wherein the front portion of the implant is designed with a conical thread which has a conicity exceeding the conicity of the slightly conical thread.

4. (Twice Amended) Implant according to claim [3] 1, wherein the conicity of the slightly conical thread is chosen between 0.1 - 0.4 mm or has an angle of inclination of about 0.5 - 2°, and/or the thread conicity of the thread at the said front portion of the implant is of the order of 0.4 - 0.8 mm or with an angle of inclination of about 10 - 15°, and the front portion of the implant has a length or height of about 10 - 30% of the length of the threaded part of the implant.

11. (Twice Amended) Threaded implant for obtaining reliable anchoring in bone substance, the bone substance being provided with a hole in whose side wall an internal threading may be established which can cooperate with an external threading on the implant for reliable anchoring and healing-in of the implant in the bone substance, wherein the implant threading is arranged to force the bone substance out in essentially radial directions as a function of the extent to which the implant is screwed into the hole, that the implant threading has a slight conicity which extends along most or part of the length of the implant and which cooperates with a circular

cylindrical hole in the bone substance to effect greater forcing out of the bone substance at the outer parts of the hole than at the inner parts of the hole, the degree of forcing out being adapted in relation to the softness of the bone substance in order to achieve the reliable anchoring, and that said conical threading comprises two or more thread spirals which provide a tight threading which permits effective integration with the bone substance during the healing-in process and counteracts deformation or breaking-up of fine bone trabeculae which surround the hole in the bone [Implant according to claim 10], wherein the number of thread spirals is two, three, or four, and wherein the number is adapted to the number of cutting edges so that symmetrical cutting forces are obtained.

16. (Amended) Threaded implant for obtaining reliable anchoring in bone substance, the bone substance being provided with a hole in whose side wall an internal threading may be established which can cooperate with an external threading on the implant for reliable anchoring and healing-in of the implant in the bone substance, wherein the implant threading is arranged to force the bone substance out in essentially radial directions as a function of the extent to which the implant is screwed into the hole, that the implant threading has a slight conicity which extends along most or part of the length of the implant and which cooperates with a circular cylindrical hole in the bone substance to effect greater forcing out of the bone substance at the outer parts of the hole than at the inner parts of the hole, the degree of forcing out being adapted in relation to the softness of the bone substance in order to achieve the reliable anchoring, and that said conical threading comprises two or more thread spirals which provide a tight threading which permits effective integration with the bone substance during the healing-in process and counteracts deformation or breaking-up of fine bone trabeculae which surround the hole in the bone [Implant according to claim 10], wherein four thread spirals are arranged together with four cutting edges.